



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">International Research Journal of Pure and Applied Chemistry</a> |
| Manuscript Number:       | 2014_IRJPAC_9624                                                             |
| Title of the Manuscript: | Support Material Effect for Pt Catalytic Activity                            |
| Type of the Article      | Original Research Article                                                    |

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

|                                            | Reviewer's comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Compulsory</u></b> REVISION comments | <p>I highly recommend to reconsider the title, since is too generic, it does not quite describe the work presented in this manuscript.</p> <p>In the abstract, I suggest to avoid using non-standard abbreviations, such as GNS, N-G. Besides, it is evident that a significant effort in rewording this section is required in order to comply with journal's standard<sup>1</sup>. For instance there is no mention of the techniques the authors employed to prove that catalytic activity in Pt/GNS is higher than Pt/N-G.</p> <p>Another important issue that must be addressed is the fact that in the experimental section, several techniques are described, <i>i.e.</i> XPS, XRD, BET, TG/DTA, TEM, CV, RRDE. However, the author does not show or even discuss most of the results obtained from such analysis; neither a supplemental file is attached.</p> <p>As a researcher, I am not quite convinced that there is a clear trend on the effect of the support. I would examine all the experimental results; not just only RRDE to state a higher catalytic activity of Pt/GNS. Also is quite vague to attribute such increase in catalytic activity to a change in the electronic structure of Pt. What does have to do such change with the support? I wonder if it is not only the fact</p> |                                                                                                                                                                               |



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|                                         | that Pt/GNS exhibits the smallest particle size of all systems under study, which make it the best catalyst. I would like to get an explanation about why the electronic structure might change using a different carbonaceous support; rather than simply changing due to the morphology of the Pt nanoparticles.                                                                                                                                                                                                                  |  |
| <b><u>Minor</u></b> REVISION comments   | <p>Please, consider checking the grammar and readability of the whole manuscript. Just to mention some of the issues found in the first page:</p> <p>Line 17: ...for ORR is <b>the</b> main challenge.</p> <p>Line 18: This is <b>caused</b> catalysts exhibit great...</p> <p>Line 19: <b>The</b> platinum (Pt) nano-particles supported on...</p> <p>Line 23: ...Pt <b>price</b> is expensive...</p> <p>The language is not adequate, it is clearly not formal, and the author tends to write sentences clearly personalised.</p> |  |
| <b><u>Optional/General</u></b> comments |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |

Note: Anonymous Reviewer